



Affordable Housing Estates for Kano State Civil Servants: Delivery Options and Management Priorities

*Umar Aliyu Abdullahi

Department of Estate, Kano State Polytechnic, (C/O Director Estate Kano State Housing), Nigeria.

DOI: 10.5281/zenodo.22727908

Submission Date: 24 July 2026 | Published Date: 12 Sept. 2026

Abstract

Affordable housing for civil servants in Kano State requires more than a low headline price. A workable scheme must match salary levels, mortgage or rent-to-own payments, transport costs, estate services and long-term maintenance. This article examines delivery options for affordable housing estates for Kano State civil servants using recent scholarly evidence and documented local case information. The review draws mainly on author-based studies from 2020 onward and uses Kano evidence on urban growth, public-estate services and recent housing interventions. Research shows that Kano has experienced strong physical expansion, while household access to affordable and well-serviced housing remains shaped by land, infrastructure, income and transport. The case record includes recent 500-unit housing initiatives and home-renovation support for public employees, which show continuing public interest in salaried-worker housing. Evidence from Nigeria also indicates that affordability differs across income groups and that delivery institutions and long-term finance matter greatly. The study proposes a Civil-Servant Housing Delivery Model built around salary segmentation, land readiness, payment choice, infrastructure, commuting cost, transparent allocation and maintenance. It argues that a Kano scheme should offer different housing and payment paths rather than one uniform product. The main policy test should be whether the full monthly cost remains manageable after occupation, including transport, utilities and service charges. The article ends with practical recommendations for allocation, finance, location and estate management. The Kano case is treated as an affordability test rather than a claim that every announced unit has produced the same result. The article therefore separates documented programme scale from the household data still needed to judge payment sustainability.

Keywords: Kano State; civil servants; affordable housing; rent-to-own; housing finance; estate management.

1.0 Introduction

Civil servants are often treated as a relatively secure housing market because they receive regular salaries. That does not mean that every public employee can carry the same house price or mortgage deduction. Salary grades differ, family needs differ and many households already face large transport, food and education costs. Research on public housing affordability in Nigeria shows that a single pricing approach can exclude lower-income workers even when a scheme is formally described as affordable (Jiburum et al., 2021; Odoiyi & Riekkinen, 2022).

Kano adds a strong location issue. The metropolis has expanded considerably, and transport demand has grown with the spread of built-up land (Koko et al., 2021; Koko et al., 2022; Otuoze et al., 2021). New housing on cheaper peripheral land may reduce development cost, but it can increase daily commuting cost and time. A civil-servant scheme should therefore consider where beneficiaries work, not only where government land is available.

Estate services are equally important. Resident evidence from public housing in Kano shows that neighbourhood infrastructure affects satisfaction and the quality of everyday life (Okopi, 2023). In practice, a household payment can become difficult when service charges rise or residents must privately provide water, energy or repairs. Affordable housing should therefore be judged by the combined cost of the dwelling, transport and basic services.

This article examines how Kano State can structure civil-servant housing so that access is fair and payments remain sustainable. It reviews the local and Nigerian evidence, compares delivery options and uses recent programme information as case material. The analysis focuses on salary bands, land and title readiness, mortgage and rent-to-own choices, infrastructure, commuting, allocation rules and maintenance. The purpose is to provide a practical design that can be adapted to different categories of public workers.

1.1 Statement of the Problem

Affordable housing remains a serious problem for civil servants in Kano State. Although government workers receive regular salaries, the cost of land, building materials, rent, transport and basic services has continued to rise. For many workers, buying a house through market prices is difficult, while mortgage plans may still require payments that are too high for lower and middle income earners. Some public housing schemes have been introduced, but the main problem is not only the number of houses provided. The location of the estates, access to roads, water, electricity, transport and the cost of maintenance after occupation affect whether the houses are truly affordable.

Another concern is that civil servants do not earn the same salary. A single housing type or payment plan may therefore favour some workers and exclude others. Poor allocation procedures, weak estate management and inadequate maintenance can reduce the value of public housing over time. In Kano State, there is a need for a housing approach that connects salary level, housing type, payment method, location, infrastructure and long-term management. This study therefore examines suitable delivery options and management priorities that can make housing estates more affordable, accessible and sustainable for civil servants in Kano State.

2.0 Literature Review

2.1 Conceptual Review: Affordability for Salaried Public Workers

For salaried workers, affordable housing is housing that can be paid for without pushing the household into serious difficulty with food, transport, education or other basic needs. The monthly burden matters more than the advertised selling price. Jiburum et al. (2021) show that affordability varies sharply across income groups, so a civil-servant scheme should recognise salary differences from the beginning.

The full housing cost includes more than mortgage or rent. Transport, electricity, water, service charges and maintenance may change what a household can carry. This is particularly important in a growing city such as Kano, where outward expansion can increase the distance between housing and jobs (Koko et al., 2021; Otuoze et al., 2021). Location should therefore be part of affordability assessment.

Delivery options can include mortgage purchase, rent-to-own, incremental construction and smaller starter units. The right mix depends on finance and household income. Evidence from Nigerian affordable-housing projects and African reviews supports long-term finance, partnerships and flexible house forms, provided that allocation and infrastructure are handled well (Nwachukwu et al., 2023; Bhanye et al., 2024; Olaniran et al., 2024).

2.2 Theoretical Framework: Housing Affordability and Institutional Delivery

Housing-affordability theory provides the first guide. Affordability is a relationship between household resources and housing costs; it is not a fixed property of a building. Two workers can face the same price but experience very different burdens because their incomes, family costs and transport needs differ. This is why income grouping is central to the article and why evidence from Abuja and other Nigerian settings remains relevant (Jiburum et al., 2021; Enwin & Ikiriko, 2023).

Institutional delivery theory explains the second part. Land agencies, housing authorities, mortgage institutions, developers and estate managers all shape the final cost and quality of a scheme. Weak title preparation, slow allocation or poor maintenance can reduce the value of otherwise sound finance. Studies of Nigerian housing policy and private affordable-housing projects show that delivery arrangements matter alongside the original policy goal (Odoyi & Riekkinen, 2022; Nwachukwu et al., 2023; Alamu, 2022).

2.3 Empirical Review

Table 1. Housing studies used to assess a Kano civil-servant scheme

Study	Focus / target	Method / model	Reported finding	Context
Okopi (2023)	Estate infrastructure	Resident survey	Residents reported mixed satisfaction; basic services need management attention	Kabuga, Kano
Koko et al. (2021)	Urban growth	Remote sensing	Built-up land expanded strongly	Kano

Study	Focus / target	Method / model	Reported finding	Context
			over 1991–2020	Metropolis
Otuoze et al. (2021)	Transport growth	CA–Markov	Urban growth increases future transport-space demand	Kano
Jiburum et al. (2021)	Public housing affordability	Housing-cost analysis	Affordability differs sharply by income group	Abuja
Nwachukwu et al. (2023)	Private affordable housing	Case evidence	Long-term affordable finance and credible partnerships aid delivery	Nasarawa
Odoyi & Riekkinen (2022)	Low-income policy	Policy analysis	Implementation arrangements are as important as policy intent	Nigeria
Bhanye et al. (2024)	Affordable innovation	Rapid review	Local materials, finance and incremental approaches can reduce barriers	Africa

Local studies make the Kano case more concrete. Koko et al. (2021) documented strong growth of built-up land, Otuoze et al. (2021) examined the transport implications of urban expansion, and Okopi (2023) found that residents' satisfaction in a public estate is affected by neighbourhood infrastructure. Dankullu (2023) also provides historical evidence of public housing development in the metropolis.

The wider Nigerian literature explains the financial and institutional side. Odoyi and Riekkinen (2022) identify policy-implementation problems, Nwachukwu et al. (2023) discuss the role of credible private investment, and Fateye et al. (2021) show how neighbourhood infrastructure may depend partly on community action. Comparative work also warns that affordable programmes can lose their target when governance and access rules are weak (Agayi & Karakayacı, 2020; Yan et al., 2022; Wijburg, 2021).

2.4 Gap in Literature

There is a large body of work on affordable housing in Nigeria, and Kano has also been studied in relation to urban growth and estate services (Adedeji et al., 2023; Koko et al., 2021; Okopi, 2023). However, fewer recent studies combine these issues specifically around the payment capacity and work location of state civil servants. Research often discusses housing supply, mortgage access, infrastructure or urban expansion separately. The missing link is a delivery design that follows a worker from eligibility through allocation, monthly payment, commuting and estate maintenance. This article fills that practical gap by combining scholarly evidence with documented Kano housing interventions and by proposing a salary-sensitive delivery model.

3. Kano Case-Study and Affordability Test

This article uses a documentary case-study design centred on Kano State civil servants. The evidence base combines recent scholarly studies on Kano urban growth, transport and estate conditions with documented housing interventions already listed in this paper. The approach is suitable because the question is not only whether housing units can be built, but whether the payment terms, location, services and allocation rules fit the income and daily costs of public-sector workers.

3.1 Case Evidence and Cross-Checking

For each documented intervention, the review recorded the number or type of units, target group, financing route and any publicly stated allocation detail. Scholarly evidence was then used to check wider conditions that can affect affordability, including peripheral growth, transport pressure, infrastructure quality and differences between income groups. No unreported household survey values were created. Where a figure is shown, it comes from the documented scheme information or the cited study.

3.2 Total Housing-Cost Ratio

A civil-servant housing scheme should be tested with the full recurring burden on the household:

$$HCR = \left(\frac{M + SC + T + U}{Y} \right) * 100 \quad (1)$$

M is the monthly mortgage or rent-to-own payment, SC is service charge, T is commuting cost, U is basic utility cost and Y is monthly net household income. The equation is deliberately broader than a mortgage-to-income ratio because peripheral estates can transfer a large cost to transport.

3.3 Mortgage Payment Equation

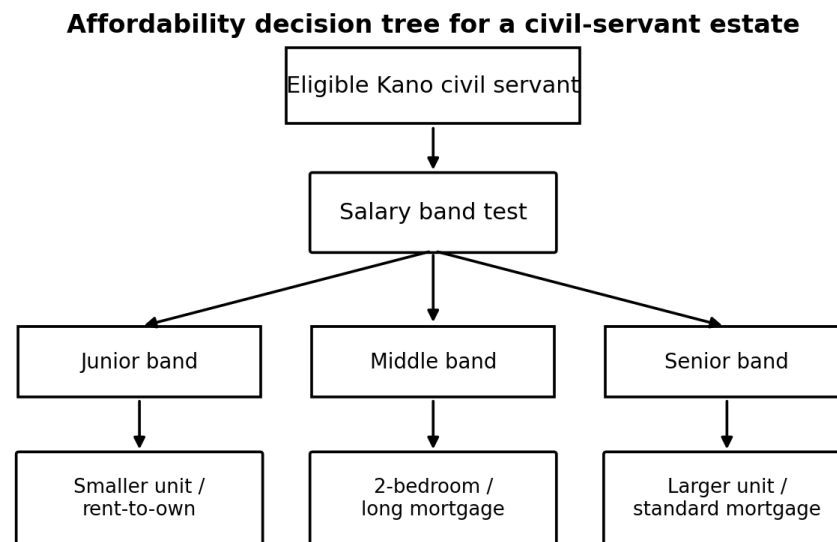
Where a mortgage option is used, the monthly payment can be calculated with the standard amortization formula:

$$PMT = P * \left[\frac{i(1+i)^n}{((1+i)^n - 1)} \right] \quad (2)$$

P is the loan principal, i is the monthly interest rate and n is the number of monthly payments. The article does not insert assumed rates; programme managers should use the actual loan terms offered to the target salary band.

3.4 Salary-Band Allocation Model

The decision tree below separates junior, middle and senior salary bands before unit size and payment route are chosen. Each branch is then checked against commute cost, service charge and infrastructure readiness. This prevents a scheme from using one unit and finance package for workers with very different earnings.



Every branch is checked again for commute cost, service charge and completed estate infrastructure

Figure 1: Salary-band affordability decision tree for a Kano civil-servant housing estate.

4. Findings

Finding from the study shows that Kano state favours a delivery system that matches house options to salary bands and keeps infrastructure and transport costs visible from the start.

4.1 Beneficiary Segmentation by Salary

A civil-servant housing scheme should begin with the salary structure of the people it is meant to serve. Junior staff, middle-level staff and senior staff do not have the same ability to provide a deposit or carry a monthly deduction. Nigerian affordability research shows that housing burden differs sharply across income groups (Jiburum et al., 2021). Wider studies also warn that formal housing can reproduce inequality when access conditions do not match household means (Anierobi et al., 2023; Olubi & Aseyan, 2022). Kano should therefore set unit types and payment options around salary bands rather than offer one standard product to every applicant.

4.2 Land and Title Readiness

Land should be legally and physically ready before workers begin making long-term payments. Title uncertainty can delay mortgage processing, weaken resale confidence and create disputes after allocation. Kano's urban expansion also makes site choice more important because fringe land is being absorbed into the metropolis (Koko et al., 2021; Koko et al., 2022). A scheme should therefore confirm ownership, planning approval, access and basic servicing before allocation. This protects the buyer and reduces the risk that a low initial land price later becomes a high infrastructure or legal cost.

4.3 Mortgage and Rent-To-Own Options

One financing route will exclude some workers. A conventional mortgage may suit applicants with enough income and savings, while rent-to-own or longer repayment may be more realistic for lower salary bands. Nwachukwu et

al. (2023) show the importance of long-term affordable finance in Nigerian housing delivery, and Odoyi and Riekkinen (2022) show why implementation details matter as much as policy intent. The scheme should publish the deposit, repayment period, effective monthly deduction and total cost for each option so that applicants can compare choices before committing.

4.4 Estate Infrastructure

A house is not fully delivered if roads, drainage, water and electricity remain uncertain. Okopi (2023) found mixed resident satisfaction with neighbourhood infrastructure in a Kano public estate, while Fateye et al. (2021) show how communities often have to respond to local infrastructure gaps elsewhere in Nigeria. A new civil-servant estate should not shift major unfinished capital works onto residents through later service charges. Core infrastructure should be substantially complete before occupation, with clear responsibility for the items that still require routine maintenance.

4.5 Commute-To-Work Costs

Location can change whether a housing payment remains affordable. Kano's growth pattern and transport modelling show that the urban footprint and travel network are expanding together (Otuoze et al., 2021; Koko et al., 2022). A worker may obtain a cheaper house on the edge of the city but spend much more every month reaching the office, school or market. Site appraisal should therefore include typical travel routes and estimated monthly transport cost. For civil servants, proximity to major employment concentrations should carry real weight in the land decision.

4.6 Service-Charge Affordability

Service charges can become a second rent if they are poorly designed. Residents need to know what the charge covers, how it is calculated and which costs belong to government or the developer rather than to the estate association. Housing and health research also shows why basic services should remain reliable and affordable after occupation (Howden-Chapman, 2023). Nigerian housing studies identify infrastructure and policy implementation as continuing constraints (Alamu, 2022; Bhanye et al., 2024). The scheme should therefore estimate service charges before allocation and test them against the same salary bands used for mortgage affordability.

4.7 Transparent Allocation

Public housing gains trust when applicants can see the rules and understand the result. Eligibility should be based on published criteria such as employment status, income band, existing housing status and ability to meet the chosen payment plan. Governance studies show that allocation and institutional rules can shape who actually benefits from affordable housing programmes (Yan et al., 2021; Yan et al., 2022). Kano should keep an auditable applicant register and record reasons for allocation, rejection or later transfer. Clear records also make it easier to control resale and speculation after handover (Wijburg, 2021).

4.8 Documented Kano Housing Interventions

Documented housing and finance interventions relevant to Kano civil servants The table should be read as a programme inventory, not as proof that every announced unit has been occupied or that every beneficiary faces the same payment burden. The 500-home Family Homes Funds partnership was publicly reported as housing for Kano civil servants, largely teachers. The 500-unit Renewed Hope City was launched with 100 one-bedroom, 300 two-bedroom and 100 three-bedroom expandable semi-detached bungalows. The renovation-loan and Panshekara figures illustrate other routes through which public employees may improve or obtain housing. These interventions provide real local evidence for discussing scale, targeting and finance, but an affordability audit still requires beneficiary salary, deposit, loan term and monthly-payment data.

Table 2: Documented housing interventions relevant to Kano

Intervention	Scale	Target / access	Documented detail
Family Homes Funds / Kano partnership	500 new homes	Civil servants, mostly teachers	Allocation papers presented in Dec. 2022; public report dated 2023
Renewed Hope City, Kano	500 units	Open affordable ownership pathways	100 one-bedroom; 300 two-bedroom; 100 three-bedroom expandable bungalows
FMBN home renovation loans	299 beneficiaries	Kano State civil servants	N236.9 million in renovation loans reported by FMBN
Panshekara / Ayab Estate	70 units	Teachers, health workers and other civil servants	One- to three-bedroom bungalows reported under FMBN-linked delivery

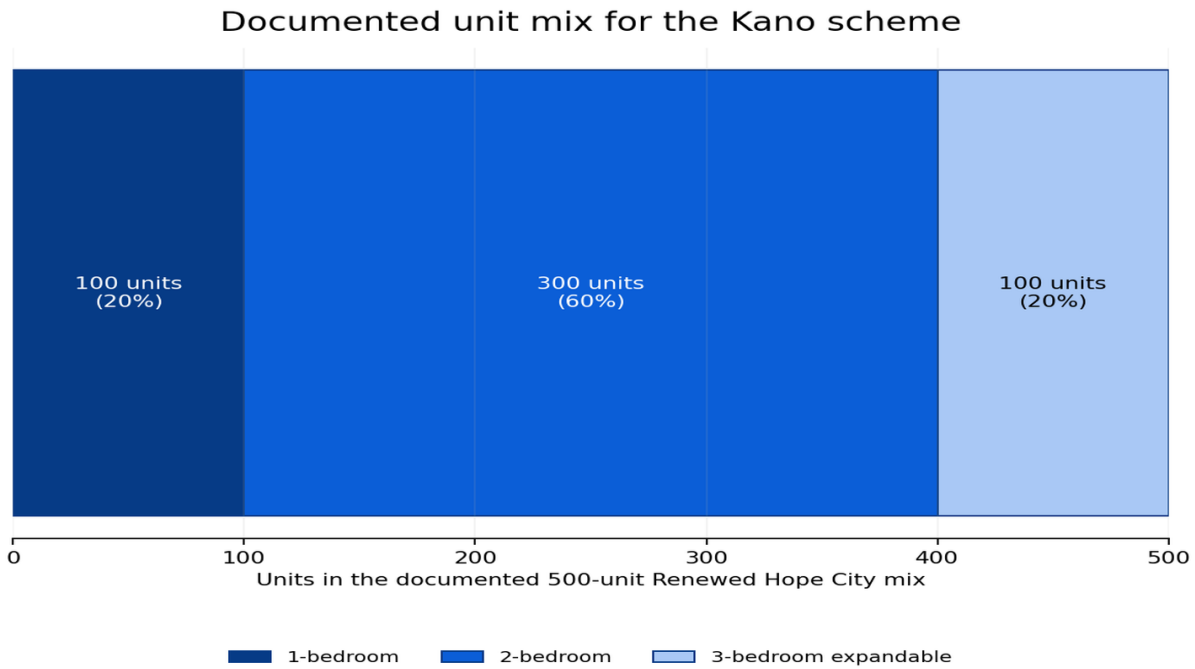


Figure 4.1. Documented unit mix in the 500-unit Renewed Hope City scheme in Kano.

5. Discussion: Can the Scheme Remain Affordable After Allocation?

A scheme can be affordable at allocation and still become difficult to sustain. The key test is whether the household can carry the full monthly housing cost.

5.1 Homeownership Access

The documented Kano initiatives show that government can create several routes into housing, including new units and renovation finance. The remaining question is who can actually use those routes. Lower-paid workers may struggle with deposits even when monthly repayment is moderate. Nigerian studies on affordability and private affordable-housing delivery show that income, finance and institutional arrangements all shape access (Jiburum et al., 2021; Nwachukwu et al., 2023). A Kano scheme should therefore report how many applicants come from each salary band, how many qualify and which payment option they choose. That makes access measurable rather than assumed.

5.2 Payment Sustainability

A monthly deduction is sustainable only if the worker can still meet other essential expenses. The test should include the housing payment, transport, utilities and routine service charges. Research on public housing affordability in Nigeria shows why income diversity matters (Jiburum et al., 2021), while policy studies stress the importance of workable implementation (Odoyi & Riekkinen, 2022). Stress tests should cover changes in energy cost, transport fares and household circumstances. A scheme that produces rising arrears after two or three years needs adjustment even if every beneficiary met the original eligibility rule.

5.3 Estate Service Quality

Estate quality affects both household welfare and the long-term public asset. Kano resident evidence shows that neighbourhood infrastructure is an important part of satisfaction (Okopi, 2023). Research on peri-urban settlements also supports improving basic services as part of sustainable development rather than treating the dwelling alone as the outcome (Okopi, 2021). The state should therefore track road condition, drainage, water reliability, lighting and maintenance response after occupation. Service data can also show whether charges are reasonable for what residents actually receive.

5.4 Fair Allocation

Fair allocation matters because a subsidised or publicly supported unit has value beyond the monthly payment. If the selection process is unclear, better-connected applicants can capture a benefit intended for workers with greater housing need. Comparative housing research shows that governance rules and continuing oversight shape inclusion in public or affordable housing (Yan et al., 2021; Wijburg, 2021). Kano should publish eligibility rules before applications open, document the scoring or selection method and keep transfer rules clear after handover. Public confidence is easier to protect when the allocation trail can be checked.

5.5 Affordability Stress Test for Civil Servants

The first affordability stress test should be based on monthly cash flow. A worker may qualify for a mortgage under a formal rule but still struggle once transport, electricity and service charges are added. Housing-health research also reminds policy makers that households should not have to choose between adequate shelter and other basic needs (Howden-Chapman, 2023). The scheme should therefore test a range of realistic household budgets before setting prices. Infrastructure governance research also cautions that technically sound systems can underperform when operating roles and user arrangements are weak (Cirolia et al., 2021; Hudon & Floricel, 2023).

The second test is location. Kano's spatial growth means that some new land will be farther from established employment areas. If a civil servant has to make a long daily trip, the transport bill becomes part of the housing cost. Urban policy in other developing settings has faced the same access problem (Agayi & Karakayacı, 2020; Shin et al., 2023). Location and transport should therefore be included in site appraisal.

The third test is institutional fairness. Public housing can lose credibility when allocation is unclear or when units move quickly to people outside the intended group. Comparative work on public rental and affordable housing shows the importance of governance rules, tenant perspective and continuing oversight (Yan et al., 2021; Yan et al., 2022; Wijburg, 2021). Kano should publish eligibility rules and keep an auditable allocation record.

A fourth issue is inclusion across salary bands. Mixed-income housing can support social balance and cross-subsidy, but only if lower-paid workers are not priced out of the estate (Olaniran et al., 2024). Sustainable low-income housing research from South Africa and other African settings also stresses governance, services and access (Mhlongo et al., 2024; Boateng & Klopp, 2024). The unit mix should therefore include realistic options for junior staff.

Infrastructure costs need equal attention. Community-based infrastructure finance can help neighbourhoods, yet a new public scheme should not depend on residents to complete basic roads, drainage or water after they move in (Fateye et al., 2021). These costs should be clear in the project budget so that service charges are not used later to recover major unfinished capital works.

The final stress test is what happens after five or ten years. A scheme that begins with affordable deductions may become difficult if buildings deteriorate or service charges rise sharply. Maintenance reserves, clear estate rules and periodic affordability reviews can protect both residents and the public asset. This turns housing delivery into a long-term programme rather than a one-time allocation exercise.

6. Practical Delivery Recommendations for Kano State

Kano State should begin with a salary and affordability profile before deciding the unit mix. Lower salary bands may need smaller starter units, longer payment periods or rent-to-own options, while higher bands may support larger units or shorter repayment. The allocation system should make these choices visible before applicants commit.

Site choice should consider commuting. A peripheral estate may be cheaper to develop, but workers should not save on house payments only to spend the difference on daily transport. Land, road access, drainage, water and electricity should be substantially ready before occupation.

Estate management should begin at the design stage. Service charges need a clear basis, maintenance reserves should be protected, and residents should know the rules for resale or subletting. Post-occupancy review can show whether arrears, commuting or service costs are making the scheme less affordable over time.

Table 3: Delivery safeguards for a Kano civil-servant housing estate

Action	Application
Match units to salary bands	Offer unit sizes and payment plans that reflect the actual earning levels of junior, middle and senior civil servants.
Offer more than one payment route	Combine mortgages with rent-to-own or longer repayment options where lower-income workers cannot meet large deposits.
Test location with commuting cost	Compare monthly housing payment with expected transport cost before selecting a peripheral site.
Complete basic estate infrastructure	Provide safe access, drainage, water and core utilities before occupation instead of recovering unfinished works later.
Publish allocation rules and records	Use clear eligibility criteria, an auditable applicant register and transparent transfer or resale controls.
Protect maintenance affordability	Set a realistic service charge, create a maintenance reserve and review arrears and estate costs after occupation.

7. Conclusion

A civil-servant housing scheme in Kano should not be designed around one standard house or one repayment plan. The evidence supports a range of unit sizes and payment options tied to salary levels, with clear attention to transport and service costs. Land and infrastructure should be ready before allocation so that workers do not carry hidden costs after moving in. Transparent eligibility, payroll-linked payment where appropriate, maintenance reserves and regular post-occupancy review can protect both households and public investment. Future work should test affordability with actual salary grades, commuting patterns, service charges and household expenditure rather than relying on the selling price alone.

References

- Adedeji, I. (2023). Nigerian urbanization and the significance of affordable housing. *Journal of Service Science and Management*, 16(3), 351–368. <https://doi.org/10.4236/jssm.2023.163020>
- Adedeji, I., Deveci, G., & Salman, H. (2023). The challenges in providing affordable housing in Nigeria and the adequate sustainable approaches for addressing them. *Open Journal of Applied Sciences*, 13, 431–448. <https://doi.org/10.4236/ojapps.2023.133035>
- Agayi, C. O., & Karakayaci, Ö. (2020). The role of changing housing policies in housing affordability and accessibility in developing countries: The case of Kenya. *Journal of Contemporary Urban Affairs*, 4(2). <https://doi.org/10.25034/ijcua.2020.v4n2-5>
- Alamu, O. I. (2022). Housing challenge and government's policy intervention: A case of service delivery in Nigeria. *International Journal of Research and Innovation in Social Science*, 6(11), 496–500.
- Anierobi, C. M., Nwalusi, D. M., Efobi, K. O., Nwosu, K. I., Nwokolo, N. C., & Ibem, E. O. (2023). Urban housing inequality and the nature of relationship between formal and informal settlements in Enugu Metropolis, Nigeria. *SAGE Open*, 13(3). <https://doi.org/10.1177/21582440231192390>
- Bhanye, J., Lehobo, M. T., Mocwagae, K., & Shayamunda, R. (2024). Strategies for sustainable innovative affordable housing for low income families in Africa: A rapid review study. *Discover Sustainability*, 5, 157. <https://doi.org/10.1007/s43621-024-00353-9>
- Boateng, F. G., & Klopp, J. M. (2024). Urbanization, legacies of elite capture, and multi-dimensional exclusions in Ghana: Towards just housing and neighborhood policies in African cities. *Urban Forum*, 35, 499–528. <https://doi.org/10.1007/s12132-024-09515-4>
- Cirolia, L. R., Hailu, T., King, J., da Cruz, N. F., & Beall, J. (2021). Infrastructure governance in the post-networked city: State-led, high-tech sanitation in Addis Ababa's condominium housing. *Environment and Planning C: Politics and Space*, 39(7). <https://doi.org/10.1177/23996544211037063>
- Dankullu, M. H. (2023). Historical study on the development of some selected public housing estates in Kano Metropolis, 1964–1984. *OmniScience: A Multi-disciplinary Journal*, 13(2). <https://doi.org/10.37591/omniscience.v13i2.3737>
- Ebekozien, A., Abdul-Aziz, A.-R., & Jaafar, M. (2021). State policy in low-cost housing provision in Southeast Asian developing countries: A systematic review. *Property Management*, 39(3), 392–407. <https://doi.org/10.1108/PM-05-2020-0034>
- Enwin, A. D., & Ikiriko, T. D. (2023). Understanding the challenges of affordable housing provision in Nigeria: An analysis of key factors and policy implications. *European Journal of Theoretical and Applied Sciences*, 1(4), 420–436. [https://doi.org/10.59324/ejtas.2023.1\(4\).38](https://doi.org/10.59324/ejtas.2023.1(4).38)
- Fateye, T. B., Odunfa, V. O., Ibisola, A. S., & Ibuoye, A. A. (2021). Basic residential neighborhood infrastructure financing in Nigeria urban cities: Community development associations (CDAs)-based approach. *Journal of Infrastructure, Policy and Development*, 5(1), 1242. <https://doi.org/10.24294/jipd.v5i1.1242>
- Howden-Chapman, P. (2023). Housing: The key infrastructure to achieving health and wellbeing in urban environments. *Oxford Open Infrastructure and Health*, 1, ouad001. <https://doi.org/10.1093/ooih/ouad001>
- Hudon, P.-A., & Floricel, S. (2023). The development of large public infrastructure projects: Integrating policy and project studies models. *Policy and Society*, 42(2), 148–163. <https://doi.org/10.1093/polsoc/puad004>
- Jiburum, U., Nwachukwu, M. U., Mba, H. C., Okonkwo, C. N., & Okeke, D. C. (2021). Determinants of public housing affordability for large income diversity groups in a new-town capital city: A case study of Abuja, Nigeria. *SAGE Open*, 11(3). <https://doi.org/10.1177/21582440211045079>
- Koko, A. F., Han, Z., Wu, Y., Abubakar, G. A., & Bello, M. (2022). Spatiotemporal land use/land cover mapping and prediction based on hybrid modeling approach: A case study of Kano Metropolis, Nigeria (2020–2050). *Remote Sensing*, 14(23), 6083. <https://doi.org/10.3390/rs14236083>
- Koko, A. F., Wu, Y., Abubakar, G. A., Alabsi, A. A. N., Hamed, R., & Bello, M. (2021). Thirty years of land use/land cover changes and their impact on urban climate: A study of Kano Metropolis, Nigeria. *Land*, 10(11), 1106. <https://doi.org/10.3390/land10111106>
- Mhlongo, Z. D., Gumbo, T., Musonda, I., & Moyo, T. (2024). Sustainable low-income housing: Exploring housing and governance issues in the Gauteng City Region, South Africa. *Urban Governance*, 4(2), 136–149. <https://doi.org/10.1016/j.ugj.2024.03.002>

19. Nwachukwu, L., Rodrigues, L., & Kiamba, L. (2023). Enabling private investment in affordable housing in Nigeria: Lessons from the experience of the Millard Fuller Foundation projects in Nasarawa State. *Journal of Risk and Financial Management*, 16(9), 411. <https://doi.org/10.3390/jrfm16090411>
20. Odoyi, E. J., & Riekkinen, K. (2022). Housing policy: An analysis of public housing policy strategies for low-income earners in Nigeria. *Sustainability*, 14(4), 2258. <https://doi.org/10.3390/su14042258>
21. Ogundipe, K. E., Owolabi, J. D., Ogunbayo, B. F., & Aigbavboa, C. O. (2024). Exploring inhibiting factors to affordable housing provision in Lagos metropolitan city, Nigeria. *Frontiers in Built Environment*, 10, 1408776. <https://doi.org/10.3389/fbuil.2024.1408776>
22. Okopi, U. M. (2021). Spontaneous settlements at the peri-urban fringe: The benefits of adopting the principles of sustainability. *Covenant Journal of Research in the Built Environment*, 8(2).
23. Okopi, U. M. (2023). Resident's satisfaction with neighborhood infrastructural provision in public residential estate Kano, Nigeria. *Covenant Journal of Research in the Built Environment*, 10(2).
24. Olaniran, T. O., Musvoto, G. G., & Aule, T. T. (2024). Potentials for adopting sustainable mixed-income housing in African cities: A bibliometric and systematic review. *Urban, Planning and Transport Research*, 12(1), 2405195. <https://doi.org/10.1080/21650020.2024.2405195>
25. Olubi, A. R., & Aseyan, B. S. (2022). Sustainable housing delivery for the urban poor in Nigeria. *International Journal of Civil Engineering, Construction and Estate Management*, 10(1), 21–34.
26. Otuoze, S. H., Hunt, D. V. L., & Jefferson, I. (2021). Predictive modeling of transport infrastructure space for urban growth phenomena in developing countries' cities: A case study of Kano—Nigeria. *Sustainability*, 13(1), 308. <https://doi.org/10.3390/su13010308>
27. Shin, Y., Kwon, Y., & Seo, D. (2023). Rethinking developmental state intervention in the housing supply of a transitional economy: Evidence from Hanoi, Vietnam. *Land Use Policy*, 132, 106795. <https://doi.org/10.1016/j.landusepol.2023.106795>
28. Wijnburg, G. (2021). The governance of affordable housing in post-crisis Amsterdam and Miami. *Geoforum*, 119, 30–42. <https://doi.org/10.1016/j.geoforum.2020.12.013>
29. Yan, J., Haffner, M., & Elsinga, M. (2021). Inclusionary housing: An evaluation of a new public rental housing governance instrument in China. *Land*, 10(3), 305. <https://doi.org/10.3390/land10030305>
30. Yan, J., Haffner, M., & Elsinga, M. (2022). Effective public rental housing governance: Tenants' perspective from the pilot city Chongqing, China. *Journal of Housing and the Built Environment*, 37, 1001–1027. <https://doi.org/10.1007/s10901-021-09872-7>

CITATION

Abdullahi, U. A. (2026). Affordable Housing Estates for Kano State Civil Servants: Delivery Options and Management Priorities. In *Global Journal of Research in Humanities & Cultural Studies* (Vol. 6, Issue 5, pp. 35–43). <https://doi.org/10.5281/zenodo.22727908>